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## We claim:

- A process for preparing tetrahydrogeranylacetone in which a liquid phase comprising at least 90% by weight of pseudoionone and in which particles of a catalyst which is capable of preferentially hydrogenating carbon-carbon double bonds over carbon-oxygen double bonds, and the active component of which comprises palladium are suspended, is conducted through a device which inhibits the transport of the catalyst particles in the presence of a hydrogen-containing gas.
- 2. A process as claimed in claim 1 , wherein the device inhibiting the transport of the catalyst particles has orifices or channels whose hydraulic diameter is from 2 to 2000 times the average diameter of the catalyst particles.
- A process as claimed in any of the preceding claims, wherein
  catalyst particles having an average diameter of from 0.0001
  to 2 mm are used.
- A process as claimed in any of the preceding claims, wherein the device used for inhibiting the transport of the catalyst particles is a dumped packing, a knit, an open-celled foam structure or a structured packing element.
- A process as claimed in any of the preceding claims, wherein the liquid phase and the hydrogen-containing gas are conducted through the device which inhibits the transport of the catalyst particles at a superficial velocity of more than 100 m<sup>3</sup>/m<sup>2</sup>h.
- 6. A process as claimed in any of the preceding claims, wherein the surfaces of the device facing toward the liquid phase have a roughness in the range from 0.1 to 10 times the average diameter of the catalyst particles.
- 7. A process as claimed in any of the preceding claims, wherein the reaction pressure is from 1 to 100 bar.
  - 8. A process as claimed in any of the preceding claims, wherein the reaction temperature is from 20 to 120°C.

- 9. A process as claimed in any of the preceding claims, wherein the reaction pressure is from 1 to 100 bar.
- 10. A process as claimed in any of the preceding claims, wherein the reaction temperature is from 20 to 120°C.